REMARKS

Specification

The specification is amended to incorporate by reference, the CD copies of the sequence

listing submitted under 37 C.F.R. §§ 1.821(c) and 1.52(e). No new matter is added by this

amendment.

Sequence Listing

The sequence listing, submitted in duplicate on CD, in lieu of a paper copy, and on CD

(CRF copy) in compliance with 37 C.F.R. §§ 1.821(c),(e) corresponds with the amendments

made to Figures 18 and 19. The Sequence Listing has been generated from the specification and

Figures and does not constitute new matter. The Sequence Listing has been prepared using

PatentIn 3.3 and checked with Checker 4.2. No error has been found.

Figures

Replacement Figures 18 and 19 are amended to include the appropriate unique and non-

redundant SEQ ID NOs., in compliance with 37 CFR §1.821-1.825. The amendments are

indicated in red pen on the "annotated marked up drawing" sheets, attached herewith. These

amendments do not constitute new matter.

Oath/Declaration

Applicants submit the Oath/Declaration for the application, executed by each inventor

(37 C.F.R. §1.63). A check for the surcharge fee (\$65.00) associated with late filing of the

oath/declaration is included.

Respectfully submitted,

McDonnell Boehnen Hulbert & Berghoff LLP

Date: SEPT. 15, 2004

Christopher P. Singer

Reg. No. 48,701

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Sequence Listing:

Please incorporate the sequence listing into the application. The sequence listing is

submitted herewith on CD in duplicate, in lieu of the paper copy, in compliance with 37 CFR §§

1.821(c) and 1.52 and on CD in compliance with 37 CFR § 1.821(e) (CRF copy). The sequence

listing does not contain new matter.

As required by 37 CFR § 1.821(f): the copy of the sequence listing on CD (in lieu of

paper copy) is the same as the CRF copy of the sequence listing.

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Facsimile: 312/913-0002

Interference Nucleic Acid (siNA)

Sheet 18 of 113

Figure 18

		SENSE STRAND (SEQ ID NO 421) 521 ALL PYRIMIDINES = 2'-O-ME OR 2'-FLUORO EXCEPT POSITIONS (N N))
A	5'-	ALL PYRIMIDINES = 2'-O-ME OR 2'-FLUORO EXCEPT POSITIONS (N N) $N_s N_s N_s N_s N N N N N N N N N N N N $	-3'
	$\begin{cases} 3 \\ 3 \end{cases}$	$L-(N_sN) NNNNNNNNNNNNNNNNN_sN_sN_sN_s$	-5' \
		ANTISENSE STRAND (SEQ ID NO 472) 522 ALL PYRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N)	
В		SENSE STRAND (SEQ ID NO 473) 523 ALL PYRIMIDINES = 2'-O-ME OR 2'-FLUORO EXCEPT POSITIONS (N N))
	5'-	N N N N N N N N N N	-3'
	ൃ 3'-	L-(NN) NNNNNNNNNNNNNNNN	-5'
		ANTISENSE STRAND (SEQ ID NO 474) 524 ALL PYRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N)	J
C		SENSE STRAND (SEQ ID NO 475) 525 ALL PYRIMIDINES = 2'-O-ME OR 2'-FLUORO EXCEPT POSITIONS (N N)	
	5'-	B-N N N N N N N N N N N N N N N N N N N	-3' >
	3'-	L -(N_s N) N N N N N N N N N N N N N N N N N N	-5'
		ANTISENSE STRAND (SEQ ID NO 476) 526 ALL PYRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N)	.)
D	ALL F	SENSE STRAND (SEQ ID NO 477) 527 PYRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N) AND ALL PURINES = 2'-DE	YXOE
	5'-	B-N N N N N N N N N N N N N N N N N N N	-3'
D	3'-	L-(N _s N) N N N N N N N N N N N N N N N N N N	-5'
	ALL	ANTISENSE STRAND (SEQ ID NO 478) 528 PYRIMIDINES = 2'-FLUORO AND ALL PURINES = 2'-O-MÊ EXCEPT POSITIONS ((א א)
		SENSE STRAND (SEQ ID NO 479) 529 ALL PYRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N)	
	5'-	B-N N N N N N N N N N N N N N N N N N N	-3'
\mathbf{E}	خ کا	L-(N _s N) NNNNNNNNNNNNNNNNN	-5'
	ALL	ANTISENSE STRAND (SEQ ID NO 480) 528 PYRIMIDINES = 2'-FLUORO AND ALL PURINES = 2'-O-ME EXCEPT POSITIONS ((ממ
	ALL P	SENSE STRAND (SEQ ID NO 477) 527 YRIMIDINES = 2'-FLUORO EXCEPT POSITIONS (N N) AND ALL PURINES = 2'-DE	YXOE
F	₹ 5'-	В- N N N N N N N N N N N N N N N N N (N N)-В	-3' >
r	3'-	L-(N _s N) N N N N N N N N N N N N N N N N N N	-5'
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ANTISENSE STRAND (SEQ ID NO 484) 530 EVALUATIONS STRAND (SEQ ID NO 484) 530	EOXA

POSITIONS (NN) CAN COMPRISE ANY NUCLEOTIDE, SUCH AS DEOXYNUCLEOTIDES (eg. THYMIDINE) OR UNIVERSAL BASES

L = GLYCERYL or B THAT IS OPTIONALLY PRESENT

B = ABASIC, INVERTED ABASIC, INVERTED NUCLEOTIDE OR OTHER TERMINAL CAP THAT IS OPTIONALLY PRESENT

S = PHOSPHOROTHIOATE OR PHOSPHORODITHIOATE that is optionally absent

ANNOTATED MARKED UP DRAWINGS

Figure 19

	_		`
		SENSE STRAND (SEQ ID NO 482) 532	
A	5'-	cscscsGGGAGGucucGuAsGsAsTsT	-3'
	3'-	L-T _S T G G G G c c c u c c A G A G c _S A _S u _S c _S u	-5' >
		ANTISENSE STRAND (SEQ ID NO 483) 533	
		SENSE STRAND (SEQ ID NO 484) 534	7
	5'-	ccccGGGAGGucucGuAGAT _S T	-3'
В	√ 3'-	L-TTGGGGcccuccAGAGcAucu	-5' >
		ANTISENSE STRAND (SEQ ID NO 485) 535	
	L		J
		SENSE STRAND (SEQ ID NO 486) 636)
	5'-	iB-cccGGGAGGucucGuAGATT-iB	-3'
\mathbf{C}	₹ 3'-	L-T _S T G G G G c c c u c c A G A G c A u c u	-5' >
		ANTISENSE STRAND (SEQ ID NO 487) 537	
	L		J
		SENSE STRAND (SEQ ID NO 488) 538	
D	5'-	iB-ccccGGGAGGucucGuAGATT-iB	-3'
D	3'-	L-T _S T gggggcccucc <u>agagca</u> ucu	-5'
		ANTISENSE STRAND (SEQ ID NO 489) 539	
	<u> </u>	SENSE STRAND (SEQ ID NO 490) 540	{
	<i>5</i> ,		
E	3	iB-ccccGGGAGGucucGuAGATT-iB	-3'
	3'-	L-T _S T g g g g c c c u c c <u>a g a g c a</u> u c u	-5' >
		ANTISENSE STRAND (SEQ ID NO 491) 541	
		SENSE STRAND (SEQ ID NO 488) 538	7
		SERIOL STRAIND (SEQ ID NO 400) 730	
1	5'-	iB-ccccGGGAGGucucGuAGATT-iB	-3'
r	3'-	L-T _S T G G G C c c u c c A G A G c A u c u	-5' }
		ANTISENSE STRAND (SEQ ID NO 492) 51/2.	
	L	~	J

lower case = 2'-O-Methyl or 2'-deoxy-2'-fluoro

italic lower case = 2'-deoxy-2'-fluoro

underline = 2'-O-methyl

ITALIC UPPER CASE = DEOXY

iB = INVERTED DEOXYABASIC

L = GLYCERYL MOIETY or iB OPTIONALLY PRESENT
S = PHOSPHOROTHIOATE OR
PHOSPHORODITHIOATE OPTIONALLY PRESENT